DESCRIPTION OF A NEW SPECIES OF LACE BUG ATTACKING THE OIL PALM IN COLOMBIA (HEMIPTERA: TINGIDAE)

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ABSTRACT—Two species of lace bugs are reported as feeding upon the oil palm, *Elaeis guineensis* Jacquin in Colombia: *Corythucha gossypii* (Fabricius) and a new species, *Leptopharsa* **gibbicarina** Froeschner. Literature records are cited for two other lace bugs on palms: *Allotingis binotata* (Drake and Bruner) from *Thrinax wendlandiana* Beccari; and *Stephanitis typica* (Distant) from oil palm and from the coconut palm. *Stephantis typica* is a vector of root wilt of the coconut palm.

Several colleagues have submitted for identification specimens of an apparently undescribed lace bug which is damaging the economically important oil palm, *Elaeis guineensis* Jacquin, in Columbia. A name and definition are needed for storing and communicating information about it.

The lace bug, in general appearances, looks very much like some members of the genus *Gargaphia* but lacks the diagnostic feature of that genus—that is, it has no transverse carina to interrupt the median sternal groove between the meso- and metasterna. Morphologically it belongs to the genus *Leptopharsa* as currently catalogued, but that genus is in serious need of redefinition and revision.

Two other species of lace bugs attack oil palms. One of the Colombian collections marked "feeding on oil palm foliage" also contained numerous individuals of the widely ranging polyphagous species *Corythucha gossypii* (Fabricius), a lace bug reported from a royal palm, *Roystonea regia* O. F. Cook by Drake and Ruhoff (1965:150). In India Joseph and Shanta (1968:19) reported a banana lace bug, *Stephanitis typica* (Distant), as expanding its taste to include the oil palm which had recently been introduced. *Stephanitis typica* is also known to feed on coconut palms where Shanta and Menon (1960:309) and Joseph, Shanta and Lal (1972:414) showed it to be an efficient vector of a root wilt of that palm. The only other palm with records of an associated lace bug is *Thrinax wendlandiana* Beccari from which Drake and Bruner (1924:155) described *Allotingis binotata.*

Leptopharsa gibbicarina Froeschner, new species

fig. 1

Diagnosis: The strong, subtriangular elevation of the median carina rising higher than the anteromedian cyst coupled with the strongly coarctate costal margins permit easy recognition of this species within the genus.

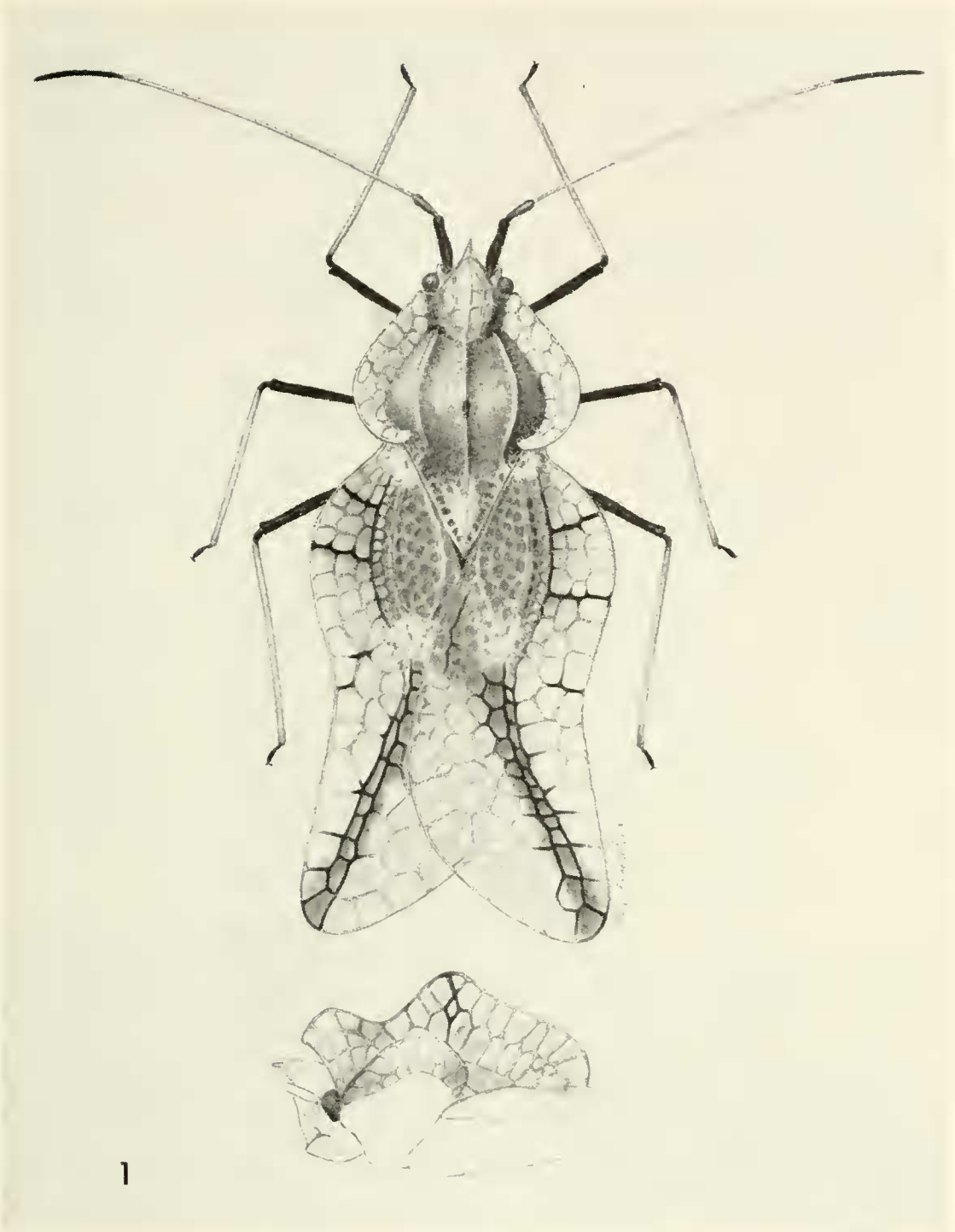

Fig. 1. *Leptopharsa gibbicarina* new species. Dorsal view and lateral view of head and thorax.

Length 2.69–2.91.

Head, pronotal surface, and body ventrally black, mostly pruinose. Antennal segments I and IV, except base, black; II brown, noticeably darker than III, latter and base of IV tan to yellow. Bucculae yellowed, more noticeably so along lower margin. Femora, extreme bases of tibiae, and tarsi black; most of tibia

yellow. Pronotal outgrowths (paranota, longitudinal carinae, and anteromedian cyst) mostly yellow veined with milky hyaline cells. Median carina with broken stripe vertically traversing tallest part. Discoidal and subcostal areas appearing fuscous, latter often with black veins; costal area in basal half with 1 to 4 black crossveins and no fuscous cross band; apical third of elytron with distinct fuscous stripe between most of length of 2 blackened veins extending from apex of subcostal area.

Head vertically deflexed, with 3 long cephalic spines, 1 decumbent occipital pair and 1 horizontal or obliquely elevated median spine above base of clypeus. Antennal segment I about as long as width of head across vertex and part of 1 eye, slightly more than 2 times as long as II, III almost 3 times as long as I plus II or as IV. Labium reaching posterior coxae.

Pronotum with somewhat compressed anteromedian cyst about as tall as head, anteriorly extended over head almost to its apex, posteriorly not extended up pronotal convexity. Median carina with 2 irregular rows of large tall cells; dorsal margin projecting higher than anteromedian cyst, gently concave on posterior slope. Lateral carinae low, uniseriate, not higher than a femoral diameter. Paranota biseriate, sometimes with partial third row in 1 or both sides, combined width greatest caudad of midlength.

Elytron with costal margins distinctly coarctate on apical ⅔; apical margins distinctly divaricate, lateral apical angle acutely rounded. Discoidal area 4 cells wide, confined to basal ⅘, slightly elevated apically. Subcostal area regularly biseriate along most of discoidal area, thence triseriate for very short distance at its apex. Costal area triseriate opposite discoidal area, becoming uniseriate apically. Hypocostal lamina uniseriate.

Peritreme transversely auriculate. Sternal laminae present on all 3 sterna, on pro- and mesosterna subparallel, on metasternum a little more separated, slightly out bowed but still subparallel; sternal groove not interrupted by transverse carina at base of metasternum. Abdomen convex, impunctate.

Variations are evident in number of blackened cross-veins in costal area (1–4); in rows of cells in the paranota (2, sometimes with partial third row in one or both paranota); and in amount of fuscous clouding associated with blackened veins below the high point of median carina. One male paratype has median cephalic spine reduced to very short tubercle.

Holotype ♂, Colombia, San Alberto, March 1, 1975, Reynaldo Garcia, on *Elaeis guineensis*, deposited in the United States National Museum of Natural History, type number 73497.

Paratypes: taken with holotype, 13 ♂♂, 18 ♀♀. Same locality, February 1975, Ph. Genty, attacking *Elaeis guineensis*, 15 ♂♂, 17 ♀♀. Puerto Wilchez, Colombia, May 29, 1973, O. D. Jiminez, on *Elaeis guineensis*, 10 ♂♂, 5 ♀♀. Colombia, 6 ♂♂, 5 ♀♀. Paratypes will be sent to: Instituto Colombiano Agropecuario, Bogota, Colombia; British Museum (Natural History), London, England; Station de Recherches de Lutte Biologique, La Miniere, France; Landbouwhogeschool, Wangeninhen, Netherlands; Museum National d'Histoire Naturelle, Paris, France.

Superficially *L. gibbicarina* looks much like *L. pensa* Drake and Hambleton because that species is also mostly milky hyaline, has a distinct black line along the two veins extending from the apex of

the subcostal area, and, at least in some specimens, has black femora; but the low, uniseriate median carina, greatly elongate erect occiptial spines, or the parallel costal margins of *L. pensa* will permit its ready separation from *L. gibbicarina.* In details *L. gibbicarina* is most similar to *L. distinconis* Drake in the strongly elevated median carina, the decumbent occipital cephalic spines, the blackened transverse veins in the basal third of the costal area, and the oblique fuscous line following the 2 veins extending from the apex of the subcostal area; but the 2 species can be easily separated by any one of 3 features because *L. distinconis* has the first antennal segment nearly 1½ times as long as width of head across both eyes (not only as long as width of vertex plus 1 eye), the costal margins straight (not coarctate), and the femora virtually wholly yellow (not black).

The fact that *L. pensa* occurs with the femora black or yellow led to the consideration that the present species might represent such a color form of some other species known only with yellow femora. Investigation of all the other species found none with the combination of the greatly elevated median carina and the coarctate costal margins.

The species name is from the Latin *gibbus*, humped, and *carina*, a ridge, in reference to the elevated dorsal outline of the median carina.

Dr. Ph. Genty, who sent one of the series of specimens, reported in a letter that the insect was moving from the foliage of a species of *Pestalozzia* (Cucurbitaceae) into the plantations of African or oil palms where it was causing economic losses.

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